

REMARKS

By this Amendment, Applicants amend claims 1, 14, 15, and 20-23. Claims 1, 13-17, and 19-23 are pending in this application.

At the outset, Applicants thank Examiners Amini and Brier for taking the time to discuss the above-referenced application during a telephone interview held on June 9, 2005. During the interview, independent claims 1, 20, 21, 22, and 23 were discussed in view of the asserted prior art reference Tamano et al. (U.S. Patent No. 6,032,157).

In the Interview Summary mailed June 17, 2005, and in the present Office Action, the Examiner indicated that several questions arose after the interview. In particular, the Examiner alleged the terms “a boundary” and “a shape” are not defined in the specification. Applicants note that the specification and as-filed originally claims use the terminology “boundary,” and remind the Examiner that claims must be given their broadest reasonable interpretation consistent with the specification and with the interpretation that those skilled in the art would reach. See MPEP § 2111. Applicants further note that claim terms are presumed to have the ordinary and customary meanings attributed to them by those of ordinary skill in the art. SEE MPEP § 2111.01. While there is no requirement that Applicants define claim terms, for purposes of context and to assist the Examiner, Applicants note that the specification describes “determining the boundaries of the new region,” for example, at page 10, lines 11-14.¹ Furthermore, in an effort to expedite prosecution, Applicants have amended claims 1,

¹ In making the various references to the specification herein, it is to be understood that Applicants are in no way intending to limit the scope of the claims to the exemplary embodiments described in the specification. Rather, Applicants expressly affirm that they are entitled to have the claims interpreted broadly, to the maximum extent permitted by statute, regulation and applicable case law.

20, 21, 22, and 23 for further clarity to recite “automatically adjusting a boundary of the second map to correspond to the selected boundary.”

In the Interview Summary, the Examiner also asked, “What are the coordinates designated for converting the first and the second maps?” Applicants note that claim 1 recites, in part, “converting *first map coordinates* designating the boundary of the geographic region selected on the first map into geographic coordinates” and “converting the geographic coordinates into corresponding *second map coordinates* designating the boundary of the geographic region on the second map.” The first map coordinates and the second map coordinates correspond to each map’s internal coordinate system, which may be expressed, for example, as raster coordinates or, alternatively, as latitudes and longitudes in vector maps.

In the Office Action,² the Examiner rejected claims 1, 13-17, and 19-23 under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. As discussed above, Applicants submit that claims are enabled because the specification sufficiently enables one of ordinary skill in the art to make and use the invention. In particular, Applicants submit that the specification fully enables determining the boundaries of a region, for example, at page 10, lines 11-14. Accordingly, Applicants respectfully request the Examiner to withdraw the rejection of claims 1, 13-17, and 19-23 under 35 U.S.C. § 112, first paragraph.

The Examiner also rejected claims 1, 13-17, and 19-20 under 35 U.S.C. § 102(e) as anticipated by Tamano et al. (U.S. Patent No. 6,032,157) and rejected claims 21-23

² The Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether any such statement is identified herein, Applicants decline to automatically subscribe to any statement or characterization in the Office Action.

under 35 U.S.C. § 103(a) as obvious over Tamano in view of Reddy et al. (“Under the Hood of GeoVRML 1.0”).

I. REJECTION OF CLAIMS 1, 13-17 AND 19-20 UNDER § 102(e)

Applicants respectfully traverse the rejection of claims 1, 13-17, and 19-20 under 35 U.S.C. § 102(e) as anticipated by Tamano. To properly anticipate Applicants’ claimed invention, the Examiner must demonstrate the presence of each and every element of the claim in issue, either expressly described or under principles of inherency, in a single prior art reference. Furthermore, “[t]he identical invention must be shown in as complete detail as is contained in the . . . claim.” See M.P.E.P. § 2121 (8th ed., Aug. 2001), *quoting* Richardson v. Suzuki Motor Co., 868 F.2d 1126, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). Finally, “[t]he elements must be arranged as required by the claim.” M.P.E.P. § 2131 (8th ed. 2001), p. 2100-69.

Claim 1 recites a method of manipulating a map including, among other things, “converting first map coordinates designating the boundary of the geographic region selected on the first map into geographic coordinates using a georeferencing function of the first map” and “converting the geographic coordinates to corresponding second map coordinates designating the boundary of the geographic region on the second map using a georeferencing function of the second map.” Tamano does not teach a method including at least these steps. Since Tamano does not teach each and every element of claim 1, it cannot anticipate claim 1.

The Tamano system refers to image information linked with attribute information as first image information, and information that approximately corresponds to the first

image information as second image information, which is not linked to the attribute information. See Tamano, col. 2, lines 41-52. Using an object contained in the second image information as a key, the Tamano system retrieves the attribute information from a database linked with the first image information by inputting a correspondence between the second image information and the first image information via the key, i.e., by selecting an object in the second image information. See Tamano, col. 2, lines 41-52. Tamano also discloses that one may “choose a part in the first image information 1 and a part in the second image information 2 so that these parts can be linked to each other” in connection with Figs. 11(a) through 11(e), which correspond to Figs. 10(a) through 10(e). See col. 8, lines 34-53. Furthermore, the process disclosed by Tamano is implemented through the use of a link information table, as shown in Fig. 3. The link information table provides linkage information between images and stores “predetermined values.” See col. 5, lines 32-63.

However, Tamano does not disclose the use of Applicants’ claimed georeferencing functions. While Tamano discloses creating a correspondences between objects of two images, Tamano is silent as to modifying the images progressively or deriving a mathematical relationship, such as Applicants’ claimed georeferencing functions to improve the correspondence between them. Instead, according to Tamano, at least one of the images has pre-stored attribute information associated with a common point in question. Such associations are stored in a lookup table as point-pairs and are used as keys to retrieve first image attribute information by selecting associated points on a second non-attributed image. Accordingly, Tamano does not disclose at least “converting first map coordinates designating the boundary of

the geographic region selected on the first map into geographic coordinates *using a georeferencing function of the first map*” and “converting the geographic coordinates to corresponding second map coordinates designating the boundary of the geographic region on the second map *using a georeferencing function of the second map*,” as recited in amended claim 1 (emphasis added). The rejection of claim 1 is improper for at least this reason.

Claim 1 also recites “automatically adjusting a boundary of the second map to correspond to the selected boundary.” Tamano also does not disclose or suggest such a step. The Examiner alleges Tamano discloses “it is possible to simultaneously choose a part in the first image information 1 and a part in the second image information 2 so that these parts can be linked to each other.” See Office Action, page 5. However, linking image information together does not disclose “*automatically adjusting a boundary of the second map to correspond to the selected boundary*,” as required by claim 1. Rather, Tamano discloses creating correspondences between images, but not automatically adjusting a boundary of a map, let alone “automatically adjusting a boundary of the second map to correspond to the selected boundary,” as recited in claim 1. In fact, in Tamano, if one were to select an unassociated region on map 1, there is no way to automatically identify and/or adjust the corresponding region on map 2. The rejection of claim 1 is improper for at least this additional reason.

Claim 1 is therefore allowable over Tamano and claims 13-17 and 19 are allowable at least due to their dependence from claim 1. Independent claim 20, although of a different scope from claim 1, includes recitations similar to that of claim 1.

For at least the same reasons discussed above in relation to allowable claim 1, Applicants respectfully request the Examiner to also allow claim 20.

II. REJECTION OF CLAIMS 21-23 UNDER § 103(a)

Applicants respectfully traverse the rejection of claims 21-23 under 35 U.S.C. § 103(a) as unpatentable over Tamano in view of Reddy. To establish a proper *prima facie* case of obviousness under 35 U.S.C. § 103(a), the Examiner must meet each of the following three requirements. First, the reference taken alone, or references combined, must teach or suggest each and every element recited in the claims. See M.P.E.P. § 2143.03 (8th ed. 2001). Second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the references in a manner resulting in the claimed invention. See M.P.E.P. § 2143.01 (8th ed. 2001). Third, a reasonable expectation of success must exist. See M.P.E.P. § 2143.02 (8th ed. 2001). Moreover, each of these requirements must be found in the prior art, and not be based on applicant's disclosure. See M.P.E.P. § 2143 (8th ed. 2001).

As discussed above, Tamano does not disclose or suggest all of the elements of claim 1. Claims 21-23, while of a different scope from each other and claim 1, include recitations similar to claim 1, and are thus distinguishable over Tamano for reasons discussed above in regard to claim 1. Furthermore, Reddy does not make up for the deficiencies of Tamano discussed above. In particular, Reddy at least fails to disclose or suggest “converting first map coordinates designating the boundary of the geographic region selected on the first map into geographic coordinates using a georeferencing

function of the first map” and “converting the geographic coordinates to corresponding second map coordinates designating the boundary of the geographic region on the second map using a georeferencing function of the second map,” as recited in claim 21. As noted, claims 22 and 23 recite limitations similar to those recited in claim 21. Accordingly, claims 21-23 are allowable over the Examiner’s proposed combination of Tamano and Reddy.

Furthermore, the Examiner admits that Tamano does not disclose the “transparency option,” but alleges that Reddy makes up for this admitted deficiency. Applicants disagree. See Office Action, page 8. In particular, Reddy does not disclose or suggest that “a background of the first map is transparent such that features of both the first map and the second map are visible,” as required by claims 21-23. Instead, Reddy discloses in Figure 2 “a terrain model ... with two tracks overlaid on terrain representing the smoothed output from a GPS receiver.” See page 24. The tracks that Reddy overlays onto a map are vector data, but do not constitute a “map.” Accordingly, Reddy does not disclose or suggest that “a background of the first map is transparent such that features of both the first map and the second map are visible,” as required by claims 21-23. The Examiner should therefore withdraw the rejection of claims 21-23 under 35 U.S.C. § 103(a) for at least this additional reason.

CONCLUSION

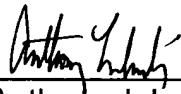
In view of the foregoing remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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